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# **RARITAN RIVER WATERFRONT STUDY**

## **FOR THE TOWNSHIP OF EDISON**

**PREPARED FOR:  
TOWNSHIP OF EDISON AND N.J.D.E.P.  
DIVISION OF COASTAL RESOURCES**

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## TABLE OF CONTENTS

SECTION 1.0	INTRODUCTION . . . . .	1
SECTION 2.0	SITE AND SURROUNDING REGION . . . . .	2
SECTION 3.0	SPECIAL AREAS . . . . .	4
SECTION 3.1	NATURAL WATER'S EDGE FLOODPLAINS . . . . .	5
SECTION 3.2	WETLANDS . . . . .	6
SECTION 3.3	WETLAND BUFFERS . . . . .	7
SECTION 3.4	INTERMITTENT STREAM CORRIDORS . . . . .	8
SECTION 3.5	PUBLIC OPEN SPACE . . . . .	9
SECTION 3.6	SPECIAL HAZARD AREAS . . . . .	10
SECTION 3.7	EXCLUDED FEDERAL LANDS . . . . .	11
SECTION 4.0	GENERAL AREAS . . . . .	12
SECTION 5.0	GENERAL LAND AREAS . . . . .	14
SECTION 5.1	ENVIRONMENTAL SENSITIVITY RATING . . . . .	15
SECTION 6.0	GENERAL LOCATION POLICIES . . . . .	16
SECTION 7.0	USE POLICIES . . . . .	17
SECTION 8.0	RESOURCE POLICIES . . . . .	18
SECTION 9.0	SYNTHESIS . . . . .	19
SECTION 10.0	ACKNOWLEDGEMENTS . . . . .	20
DRAWING 1 OF 3	STUDY AREA LOCATION MAP	
DRAWING 2 OF 3	SPECIAL & GENERAL AREAS MAP	
DRAWING 3 OF 3	MUNICIPAL BOAT BASIN	

HT168.E3 R37 1990

## SECTION 1.0 INTRODUCTION

Presented herewith is a narrative description and accompanying drawings of the Raritan River Study Area. The report was prepared through a Federal Grant in conjunction with the New Jersey Department of Environmental Protection, Division of Coastal Resources, and the Township of Edison.

The purpose of the report is to analyze the Edison Waterfront Area and develop a plan to determine areas suitable for public access. These areas will provide the Township with identified locations for future improvements.

The report was prepared in accordance with Chapter 7E of the Coastal Resources and Development Policies. Specific mapping and report guidelines were established using the Coastal Location Acceptability Method.

## SECTION 2.0 SITE AND SURROUNDING REGION

The Edison Waterfront Study Area is a 5.6 mile area that stretches along the Raritan River from Woodbridge Township to the east to the Borough of Highland Park to the west. The river also serves as a boundary line to the south for the City of New Brunswick, Township of East Brunswick and the Borough of Sayreville.

The area immediately adjacent to the river is presently undeveloped. The 1989 Township Master Plan provides for open space and conservation districts within this area. The Master Plan also proposes a Planned Unit Development in the area along the eastern portion of the river. Most of the study area lies within the 100 year floodplain and extensive wetlands also exist in this area. Access to the waterfront is inhibited due to the environmental sensitivity of the surrounding land and private land ownership.

Presently, there are two areas where vehicular and pedestrian access is possible to the waterfront. The first area is located off Meadow Road and contains the Edison Municipal Boat Basin. This area is frequently used by Township residents for both passive and active recreation.

The second area is the Patrol Road that travels parallel to the river along the eastern portion of the Township boundary. This road was built in the mid-1920's and was used by the U.S. Army as a method of guarding the former Raritan Arsenal.

The Arsenal was closed several decades ago. The property was disposed of through Government Services Administration (G.S.A.). The road is seldom used today. The road is maintained as a private right-of-way and therefore access is restricted. The Patrol Road provides potential points of access to the waterfront from Mill Road and Pershing Avenue. March Road is a proposed right-of-way being built in conjunction with the Planned Unit Development. The study area also contains three landfills as well as land owned by the Federal, State and local government. These areas are further identified in later sections of the text and are identified on Sheet 2 of 3 of the submitted drawings.

### SECTION 3.0 SPECIAL AREAS

Special Areas as defined by the Coastal Resource and Development Policies consist of 45 types of coastal areas which merit focused attention and special management policies. The areas are identified on Sheet 2 of 3 of the submitted drawings and are further defined independently in the text.

### SECTION 3.1 NATURAL WATER'S EDGE FLOODPLAINS

Floodplains are areas with the natural capacity to absorb rain and floodwater. The areas are designated because of the unsuitability for development as a result of flood hazard potential, water storage capacity and poor drainage characteristics.

The floodplains for the Edison Waterfront Area were identified using the Federal Emergency Management Agency's Township of Edison's Floodway Maps of June 19, 1985. The 100 year and 500 year floodplains were mapped in accordance with the FEMA study.

The floodplains encompass substantial portions of the study area and therefore development in the area is restricted due to the permitting process and practical constraints. Due to the design of the existing roadways, they are relatively unaffected by the floodplains.



## SECTION 3.2 WETLANDS

Wetlands are defined by the New Jersey Department of Environmental Protection as areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

Wetlands are typically found between upland areas and open water bodies. They act as filters in remaining pollutants, sediments and metals from run-off water before they enter the river, streams and lakes. They also contribute in the production of oxygen and food which support aquatic life.

The areas indicated on the plan were mapped according to the National Wetlands Inventory (NWI) map of October, 1976. The NWI indicates the presence of one type of wetland along the waterfront area. The type, E2EM, is classified as Estuarine intertidal emergent wetland. These wetlands consists of tidal brackish waters and wetlands that are diluted by stormwater run-off.

In identifying points of access to the waterfront, existing routes will be utilized and therefore no disturbance of the wetlands will occur. The Patrol Road is an existing road that is classified as uplands by the NWI.

### SECTION 3.3 WETLAND BUFFERS

All areas within 300 feet of the wetlands and within the drainage area of the wetlands will require a buffer as designated by NJDEP. The buffering will be required for any type of development in the waterfront area. The proposed March Road right-of-way is being developed in conjunction with a Planned Unit Development known as Rivertown. The developer is responsible for obtaining appropriate permits for construction of the roadway. As a result, since no new development is proposed with this study, wetlands buffers will not be effected by this project.

#### SECTION 3.4 INTERMITTENT STREAM CORRIDORS

Intermittent stream corridors are areas including and surrounding surface water drainage channels in which there is not a permanent flow of water. These areas are indicated on the plan as creeks and ditches. These areas are all located in the 100 year floodplain. No disturbance is proposed for these areas.

### SECTION 3.5 PUBLIC OPEN SPACE

Public open space consists of lands owned and maintained by State, Federal, County and municipal agencies. This land is used for the conservation of natural resources, public recreation and wildlife protection and management.

The County owns land which consists of Middlesex County College. This tract is 174.5 acres and provides area residents with a higher educational facility.

The County also owns land which consists of Thomas A. Edison Park. This tract of land is 164.7 acres and is located adjacent to the Patrol Road. This land serves the Township, as well as County residents for active and passive recreation.

The proposed study proposes no alterations to the publicly owned lands.

### SECTION 3.6 SPECIAL HAZARD AREAS

Special hazard areas are areas with a known actual or potential hazard to public health, safety and welfare of the residents of the Township. The three landfills located south of the New Jersey Turnpike constitute a Special Hazard Area. The first two special hazard areas are the KIN-BUC and the Industrial Land Reclamation Incorporated (ILR) Landfills. Both of these landfills are privately owned with KIN-BUC being designated as a superfund site. The landfills are no longer in operation and are monitored by the Environmental Protection Agency.

The last landfill is owned by the Township of Edison. This landfill has been ordered closed on August 27, 1990 because it has reached full capacity. The landfill operation and closure has been monitored by the New Jersey Department of Environmental Protection Division of Solid Waste Management. No development or access points will interfere with any of the above mentioned special hazard areas.

### SECTION 3.7 EXCLUDED FEDERAL LANDS

Excluded Federal lands are those lands that are owned, leased, held in trust or whose use is otherwise by law subject solely to the discretion of the United States of America.

The only Federally owned parcel of land is located directly south of Woodbridge Avenue. This land is owned by Government Services Administration and is operated by the Environmental Protection Agency. The land is currently being subdivided in accordance with Federal regulations.

## SECTION 4.0 GENERAL AREAS

Section 7:7E-4.7 defines a large river as a river with watersheds greater than 1,000 square miles. The Raritan River is a tidal river from a point approximately 1.1 miles upstream from the Landing Lane Bridge between Piscataway and Franklin Township to its mouth at Raritan Bay and the Arthur Kill. The river is located along the southernmost portion of the Township and is designated on the drawings.

According to the Water Area Policy summary table structures such as Boat Ramps and Docks are conditionally accepted in large rivers.

Boat ramps are inclined planes extending from the land into a water body for the purpose of launching a boat until the water depth is sufficient to allow the boat to float. An existing ramp is located at the Edison Municipal Boat Basin and is constructed of concrete. The Township requires permits by residents to use this facility.

Docks and piers are structures supported on piling driven down into the bottom substrate, or floating on the water surface. The area adjacent to the Patrol Road contains an existing bulkhead where possible future marine access could occur. The bulkhead is 8618.46 linear feet and is not presently used due to private ownership and control. The bulkhead is also in disrepair and shoaled.

The boat basin contains a small floating dock that enables temporary docking of boats launched from the boat ramp. This area is in need of additional redevelopment to further promote the use of marine access in the area.



## SECTION 5.0    GENERAL LAND AREAS

General land areas include all mainland features located upland of special water's edge areas. They begin at the 100 year flood hazard line for this particular study and continue north into Edison Township. Part of the Edison Park and all of the County College and Government Services Administrator land is located in the General Land Areas. These areas have been mapped on Sheet 2 of 3 of the submitted drawings. No development is proposed in the areas.

## SECTION 5.1 ENVIRONMENTAL SENSITIVITY RATING

N.J.D.E.P. has adopted an Environmental Sensitivity Rating system which rates suitability of land for development. Most of the land is designated as high sensitivity under N.J.D.E.P. standards due to the moist soils and high water table.

The area near the boat basin and the Patrol Road will have a low sensitivity rating due to the existing pavement in the area. These low sensitivity areas are the areas where access will be encouraged for future development. Since no development is proposed, development potential has not been analyzed.

## SECTION 6.0 GENERAL LOCATION POLICIES

The Raritan River Study Area was chosen for potential development due to its location in the Township as well as the potential for vehicular, pedestrian and marine access.

The Municipal Boat Basin area was identified as an area for potential development due to its waterfront access, existing facilities and direct vehicular access from Meadow Road. This area is in need of improvement in the parking layout, and the possible expansion of boat docking facilities in the area. This site also has potential for the design of additional recreation facilities in the form of picnic areas and other amenities.

The Patrol Road study area provides for vehicular access from Mill Road, proposed March Road and Pershing Avenue. These roads provide the potential for direct access to the waterfront area. Possible development in this area includes nature trails, picnic areas, and fishing piers. Development in this area will be planned in conjunction with the proposed Planned Unit Development in this area. The existing bulkhead will provide the site with potential boat docking. This area will need further evaluation and analysis to determine impacts of improvements and permitting process.

The location is in accordance with coastal policy in that existing transportation corridors will be used. Further development will also preserve, protect, and enhance the existing environment and should be identified in subsequent analysis.

## SECTION 7.0 USE POLICIES

Use policies are policies and conditions set forth for a particular type of development. The first use policy effected by the study area is Section 7:7E-7.3, which is resort/recreational use. Through this study, two areas have been identified for future development. This enables the Township to be eligible for Green Acres and Shore Protection Bond Funding.

Though the primary intent of this study is to identify areas of public access, additional areas were analyzed to determine future recreational development along the Raritan River. Future development of the boat basin area and Patrol Road area will be incorporated into future studies.

## SECTION 8.0    RESOURCE POLICIES

Resource policies provide for a review of the proposed development in terms of its effect on various resources of the built and natural environment. As previously stated, the purpose of this grant is to determine areas suitable for public access and no development is proposed. Section 7:7E-8.11 of the Resource Policy Section defines public access to the waterfront as the ability of all members of the community to pass physically and visually to, from, and along the waterfront.

Linear development in the form of a Patrol Road is currently the only roadway along the river in the western portion of the Township. This roadway is privately owned and access is restricted. Additional roadway development is considered very speculative due to the environmental sensitivity of the land. Potential vehicular access also exists for the Patrol Road to the boat basin and from existing public rights-of-way within the Township.

Any future development of these areas will provide for appropriate signage as well as barrier free access to the areas. The boat basin currently provides an identification sign as well as barrier free access to the river. A linkage of the boat basin facility and the Patrol Road will require obtaining the right-of-ways.

Additional resource policies such as traffic, wet soils, and flood prone areas will be further examined in future studies when development is proposed.

## SECTION 9.0 SYNTHESIS

The access areas and study areas have been determined after careful consideration of the various planning and environmental characteristics of the waterfront area. The Edison Municipal Boat Basin currently has existing vehicular and marine access to the site. By upgrading these facilities in the form of parking alignment, boat docks and designed open space, the Township will be able to further address needs and the increased use of this area.

The Patrol Road area represents the only potential for linear access to the river. By obtaining public access to this road and providing parking areas accordingly, the Township will have substantial additional area for waterfront recreation. This area has the potential for fishing piers, boat docks and nature trails that the residents of the Township can use for passive and active recreation. This area will also be used by the residents of the Planned Unit Development. Once developed, the PUD will require removal of a portion of the Patrol Road, thus requiring residents to obtain access from one of the designated roadways indicated on the submitted drawings.

Though no development is proposed in this study, the two areas identified are best suited for recreational development due to their location to adjacent facilities and transportation routes. These areas will provide for the protection and enhancement of the waterfront area for the future of Edison Township.

## SECTION 10.0 ACKNOWLEDGEMENTS

This report was prepared under contract with the New Jersey Department of Environmental Protection, Division of Coastal Resources, Planning Group with the financial assistance of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management, under the provisions of the federal Coastal Zone Management Act, P.L. 92-583, as amended.

